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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,847	01/08/2004	Danielle Lagard	IFF-75	6031
48/861	7590	10/15/2008		
INTERNATIONAL FLAVORS & FRAGRANCES INC. 521 WEST 57TH ST NEW YORK, NY 10019				
EXAMINER				
RAMILLANO, LORE JANET				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
10/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/753,847

Applicant(s)

LAGARD ET AL.

Examiner

LORE RAMILLANO

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/27/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 4 is/are rejected.
- 7) ☒ Claim(s) 2 and 5-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/8/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Status of Claims

1. In applicant's reply filed on 6/27/08, applicant amended claims 1-2. Claims 1-25 are pending and under examination.
2. Applicant should note that the Office action and PTO-326 Office Action Summary Form, filed on 1/28/08, contained an inadvertent typographical error by indicating that claims 1-20 were rejected. The Office action and PTO-326 Office Action Summary Form should have indicated that claims 1-25 were rejected.

Claim Objections

3. The objection to claim 2 is withdrawn.

Claim Rejections - 35 USC § 112

4. The rejection of claims 1 and 2 under 35 USC 112, second paragraph, is withdrawn.

Oath/Declaration

5. The Declaration to disqualify commonly owned published application as prior art under 37 CFR 1.130, filed by applicant on 6/27/08, is sufficient to overcome the 35 USC 103(a) rejection over Brain (US Pub. No. 2004/0072720). However, the Declaration is not sufficient to overcome the 35 USC 102(e) rejection by Brain.

Terminal Disclaimer

6. The Terminal Disclaimer filed by applicant on 6/27/08 was "disapproved" on 8/4/08 because it was noted that the cited A reference was not a Patent No. Thus, the Terminal Disclaimer is not sufficient to overcome the 35 USC 102(e) rejection by Brain.

Applicant should further note that because the prior Office action, filed on 1/28/08, did not include a Double Patenting rejection, such rejection is moot.

Prior art rejections

7. The 35 USC 103(a) rejection over the prior art is withdrawn. The 35 USC 102 rejections by the prior art are maintained.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1, 3, and 4** are rejected under 35 U.S.C. 102(b) as being anticipated by Ledig (US 6495375).

Ledig discloses an apparatus for quantitatively and qualitatively enabling the analysis of a volatile substance encapsulated in a plurality of rupturable microcapsules each of which (a) has a rupturable polymeric wall; (b) has an outside diameter in the range of from about 0.01 microns to about 1000 microns and has a wall thickness in the range of from about 0.01 microns to about 100 microns; (c) contains from about 50% to about 97% by weight of volatile substance or solution of volatile substance; and (d) is releasably adhered to the surface of a semi-solid substrate section, comprising: (i) a horizontally-situated reciprocatingly-movable horizontal substantially solid substantially planar surface located in the 'X-Y' plane associated with a driving means therefor for effecting a reciprocating motion of said substantially solid substantially

planar surface at a controllable frequency ϕ or set of frequencies, ϕ_1 , ϕ_2 , ϕ_3 , ϕ_n , (wherein n is an integer in the range of from 1 to about 20) for a determined period of time, θ ; (ii) substantially removably supported on said substantially solid substantially planar surface, said hollow enclosure means having a void space surrounded by a gas-impermeable horizontally-disposed base, a gas-impermeable horizontally-disposed lid and a gas-impermeable substantially cylindrical wall extending upwardly from and circumventing said base and extending downwardly from and circumventing said lid, said lid and/or said cylindrical wall having at least one exit port means and an entry port means therethrough, said hollow enclosure means being maintained in a stable, rigid, upright configuration during operation of said apparatus and being adapted to stably contain (I) a plurality of mobile solid-state spheres and/or ellipsoids each of which has a weight of from about 1 gm to about 100 gm, a density of from about 2 gm/cc to about 10 gm/cc, an average diameter of from about 0.5 cm to about 3.0 cm. and a surface hardness Knoop value in the range of from about 160 to about 220 and (II) inter-leaved between layers of said plurality of spheres and/or ellipsoids, semi-solid substrate sections having laminar surfaces, each of which has adhered thereto a plurality of said volatile substance-containing rupturable microcapsules each of which has a surface hardness Knoop value in the range of from about 10 to about 20 and a microcapsule wall tensile strength several orders of magnitude less than the tensile strength of each of said solid-state spheres and/or ellipsoids, with the range of mass ratios of said plurality of spheres and/or ellipsoids, semi-solid substrate sections being in the range of from about 20:1 to about 100:1; (iii) analyte collection means located downstream from

said hollow enclosure means and communicating with said exit port means thereof, consisting essentially of tube trapping means whereby analyte mixture components emitted from said hollow enclosure means during gas flow therethrough and simultaneous operation of said horizontally-situated oscillatably-movable horizontal substantially solid substantially planar surface are entrapped in said tube trapping means; and (iv) upstream from said hollow enclosure means or downstream from said analyte collection means, gas flow-effecting means for effecting the flow of gas sequentially (I) from a location upstream from said first entry port means; (II) through said first entry port means; (III) into said hollow enclosure means in a direction substantially perpendicular to the plane of said base; (IV) past each of said plurality of spheres and/or ellipsoids; (V) through said exit port means of said hollow enclosure means and (VI) into and through said analyte collection means (i.e. figs. 1A-D, col. 2, line 1 to col. 5, line 19).

Ledig further discloses the following: the gas flow effecting means is upstream from said hollow enclosure means by means of pressurizing the carrier gas upstream from said hollow enclosure means; and the gas flow effecting means is downstream from said analyte collection means using vacuum pump means located downstream from said analyte collection means (i.e. figs. 1A-D, col. 2, line 1 to col. 5, line 19).

9. **Claims 1, 3, and 4** are rejected under 35 U.S.C. 102(b) as being anticipated by Elmore et al. ("Elmore," *Comparison of Dynamic Headspace Concentration on Tenax with Solid Phase Microextraction for the Analysis of Aroma Volatiles*, 1997).

Elmore discloses an apparatus for quantitatively and qualitatively enabling the analysis of a volatile substance encapsulated in a plurality of rupturable microcapsules each of which (a) has a rupturable polymeric wall; (b) has an outside diameter in the range of from about 0.01 microns to about 1000 microns and has a wall thickness in the range of from about 0.01 microns to about 100 microns; (c) contains from about 50% to about 97% by weight of volatile substance or solution of volatile substance; and (d) is releasably adhered to the surface of a semi-solid substrate section, comprising: (i) a horizontally-situated reciprocatingly-movable horizontal substantially solid substantially planar surface located in the 'X-Y' plane associated with a driving means therefor for effecting a reciprocating motion of said substantially solid substantially planar surface at a controllable frequency ϕ or set of frequencies, ϕ_1 , ϕ_2 , ϕ_3 , ϕ_n , (wherein n is an integer in the range of from 1 to about 20) for a determined period of time, θ ; (ii) substantially removably supported on said substantially solid substantially planar surface, said hollow enclosure means having a void space surrounded by a gas-impermeable horizontally-disposed base, a gas-impermeable horizontally-disposed lid and a gas-impermeable substantially cylindrical wall extending upwardly from and circumventing said base and extending downwardly from and circumventing said lid, said lid and/or said cylindrical wall having at least one exit port means and an entry port means therethrough, said hollow enclosure means being maintained in a stable, rigid, upright configuration during operation of said apparatus and being adapted to stably contain (I) a plurality of mobile solid-state spheres and/or ellipsoids each of which has a weight of from about 1 gm to about 100 gm, a density of from about 2 gm/cc to about 10

gm/cc, an average diameter of from about 0.5 cm to about 3.0 cm. and a surface hardness Knoop value in the range of from about 160 to about 220 and (II) inter-leaved between layers of said plurality of spheres and/or ellipsoids, semi-solid substrate sections having laminar surfaces, each of which has adhered thereto a plurality of said volatile substance-containing rupturable microcapsules each of which has a surface hardness Knoop value in the range of from about 10 to about 20 and a microcapsule wall tensile strength several orders of magnitude less than the tensile strength of each of said solid-state spheres and/or ellipsoids, with the range of mass ratios of said plurality of spheres and/or ellipsoids, semi-solid substrate sections being in the range of from about 20:1 to about 100:1; (iii) analyte collection means located downstream from said hollow enclosure means and communicating with said exit port means thereof, consisting essentially of tube trapping means whereby analyte mixture components emitted from said hollow enclosure means during gas flow therethrough and simultaneous operation of said horizontally-situated oscillatably-movable horizontal substantially solid substantially planar surface are entrapped in said tube trapping means; and (iv) upstream from said hollow enclosure means or downstream from said analyte collection means, gas flow-effecting means for effecting the flow of gas sequentially (I) from a location upstream from said first entry port means; (II) through said first entry port means; (III) into said hollow enclosure means in a direction substantially perpendicular to the plane of said base; (IV) past each of said plurality of spheres and/or ellipsoids; (V) through said exit port means of said hollow enclosure

means and (VI) into and through said analyte collection means (i.e. p. 2638, col. 2 to p. 2639, col. 1).

Elmore further discloses the following: the gas flow effecting means is upstream from said hollow enclosure means by means of pressurizing the carrier gas upstream from said hollow enclosure means; and the gas flow effecting means is downstream from said analyte collection means using vacuum pump means located downstream from said analyte collection means (i.e. p. 2638, col. 2 to p. 2639, col. 1).

10. **Claims 1 and 3-4** are rejected under 35 U.S.C. 102(e) as being anticipated by Brain et al. ("Brain," US Pub. No. 2004/0072720).

Brain discloses an apparatus for quantitatively and qualitatively enabling the analysis of a volatile substance encapsulated in a plurality of rupturable microcapsules each of which (a) has a rupturable polymeric wall; (b) has an outside diameter in the range of from about 0.01 microns to about 1000 microns and has a wall thickness in the range of from about 0.01 microns to about 100 microns; (c) contains from about 50% to about 97% by weight of volatile substance or solution of volatile substance; and (d) is releasably adhered to the surface of a semi-solid substrate section, comprising: (i) a horizontally-situated reciprocatingly-movable horizontal substantially solid substantially planar surface located in the 'X-Y' plane associated with a driving means therefor for effecting a reciprocating motion of said substantially solid substantially planar surface at a controllable frequency ϕ or set of frequencies, ϕ_1 , ϕ_2 , ϕ_3 , ϕ_n , (wherein n is an integer in the range of from 1 to about 20) for a determined period of time, θ ; (ii) substantially removably supported on said substantially solid substantially

planar surface, said hollow enclosure means having a void space surrounded by a gas-impermeable horizontally-disposed base, a gas-impermeable horizontally-disposed lid and a gas-impermeable substantially cylindrical wall extending upwardly from and circumventing said base and extending downwardly from and circumventing said lid, said lid and/or said cylindrical wall having at least one exit port means and an entry port means therethrough, said hollow enclosure means being maintained in a stable, rigid, upright configuration during operation of said apparatus and being adapted to stably contain (I) a plurality of mobile solid-state spheres and/or ellipsoids each of which has a weight of from about 1 gm to about 100 gm, a density of from about 2 gm/cc to about 10 gm/cc, an average diameter of from about 0.5 cm to about 3.0 cm. and a surface hardness Knoop value in the range of from about 160 to about 220 and (II) inter-leaved between layers of said plurality of spheres and/or ellipsoids, semi-solid substrate sections having laminar surfaces, each of which has adhered thereto a plurality of said volatile substance-containing rupturable microcapsules each of which has a surface hardness Knoop value in the range of from about 10 to about 20 and a microcapsule wall tensile strength several orders of magnitude less than the tensile strength of each of said solid-state spheres and/or ellipsoids, with the range of mass ratios of said plurality of spheres and/or ellipsoids, semi-solid substrate sections being in the range of from about 20:1 to about 100:1; (iii) analyte collection means located downstream from said hollow enclosure means and communicating with said exit port means thereof, consisting essentially of tube trapping means whereby analyte mixture components emitted from said hollow enclosure means during gas flow therethrough and

simultaneous operation of said horizontally-situated oscillatably-movable horizontal substantially solid substantially planar surface are entrapped in said tube trapping means; and (iv) upstream from said hollow enclosure means or downstream from said analyte collection means, gas flow-effecting means for effecting the flow of gas sequentially (I) from a location upstream from said first entry port means; (II) through said first entry port means; (III) into said hollow enclosure means in a direction substantially perpendicular to the plane of said base; (IV) past each of said plurality of spheres and/or ellipsoids; (V) through said exit port means of said hollow enclosure means and (VI) into and through said analyte collection means (i.e. para. [0109]-[0112]).

Brain further discloses the following: the gas flow effecting means is upstream from said hollow enclosure means by means of pressurizing the carrier gas upstream from said hollow enclosure means; and the gas flow effecting means is downstream from said analyte collection means using vacuum pump means located downstream from said analyte collection means (i.e. para. [0109]-[0112]).

Allowable Subject Matter

11. Claims 2 and 5-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record (Brain) fails to teach or fairly suggest the step of placing into the void space of a hollow enclosure means (I) layers of a plurality of mobile solid-state spheres and/or ellipsoids each of which has a surface hardness Knoop value of

from about 160 to about 220, in combination with the remaining features and elements of the claimed invention.

Response to Arguments

13. Applicant's arguments, see p. 11, filed 6/27/08, with respect to the rejection of claims 2 and 5-25 over Brain in view of Schmidt have been fully considered and are persuasive. This rejection has been withdrawn.

14. Applicant's arguments filed 6/27/08, with respect to the 35 USC 102 rejections have been fully considered but they are not persuasive.

Rejections by Ledig and Elmore

In response to applicant's argument that neither Ledig or Elmore does not disclose the following: (I) a plurality of mobile solid-state spheres and/or ellipsoids each of which has a weight of from about 1 gm to about 100 gm, a density of from about 2 gm/cc to about 10 gm/cc, an average diameter of from about 0.5 cm to about 3.0 cm. and a surface hardness Knoop value in the range of from about 160 to about 220 and (II) inter-leaved between layers of said plurality of spheres and/or ellipsoids, semi-solid substrate sections having laminar surfaces, each of which has adhered thereto a plurality of said volatile substance-containing rupturable microcapsules each of which has a surface hardness Knoop value in the range of from about 10 to about 20 and a microcapsule wall tensile strength several orders of magnitude less than the tensile strength of each of said solid-state spheres and/or ellipsoids, with the range of mass ratios of said plurality of spheres and/or ellipsoids, semi-solid substrate sections being in the range of from about 20:1 to about 100:1, Examiner respectfully disagrees.

Applicant should note that a structure, which is capable of providing the intended use, is considered to meet the limitation of intended use recited in a claim to a device or an apparatus. Furthermore, a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations

Rejected claims 1 and 3 contain intended use terms, i.e. "for," and "adapted to." The Office takes the position that these claims may be interpreted in light of the structural elements that are disclosed and not for their intended use as stated after the terms "for," and "adapted to." Thus, because the applied references are capable of meeting these functions, the prior art rejections are maintained.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LORE RAMILLANO whose telephone number is (571)272-7420. The examiner can normally be reached on Mon. to Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797

Lore Ramillano
Examiner
Art Unit 1797